

ISIS - Feature #3880

Develop radiometric calibration application, amicacal, for the Hayabusa AMICA framing instrument

2016-03-31 02:18 PM - Kris Becker

Status:	Resolved	Software Version:
Priority:	Normal	
Assignee:	Tyler Wilson	
Category:	Applications	
Target version:	3.4.13 (FY16 R3 2016-08-31 Aug)	
Impact:	This is a calibration application for the AMICA instrument on Hayabusa, and will not affect other parts of ISIS.	
Description The Hayabusa AMICA instrument requires a radiometric calibration correction application. The steps required to implement the calibration are: 1) BIAS – Formula and subtract using center date. Check for smear-corrected pictures (already corrected for bias? ~SKY=0) 2) LINEARITY 3) DARK is negligible and likely won't be added 4) HOT PIXELS – we just use the six top hot pixels (table6) 5) SMEAR REMOVAL (>10/02/2005) extract sky value (edge of frame?) 6) FLAT FIELD – Pre-flight flats then derive time-dependent flats derived from the FF lamp measurements? 7) CONVERSION DN to I/F – Conversion factors+ solar distance. Will check the conversion factor we have to use. 8) PSF correction References: The Hayabusa Spacecraft Asteroid Multi-Band Imaging Camera (AMICA), Ishiguro, M. et al, http://arxiv.org/abs/0912.4797		
Related issues:		
Copied to ISIS - Feature #4221: Develop radiometric calibration application, ...		Closed
Copied to ISIS - Feature #4222: Develop radiometric calibration application, ...		Closed

History

#1 - 2016-04-04 06:42 PM - Tammy Becker

- Status changed from New to Acknowledged

#2 - 2016-04-18 12:41 PM - Tyler Wilson

- Status changed from Acknowledged to In Progress

#3 - 2016-07-15 03:50 PM - Tyler Wilson

- Impact updated

#4 - 2016-07-15 03:53 PM - Tyler Wilson

- Status changed from In Progress to Resolved

#5 - 2016-08-11 04:49 PM - Tyler Wilson

- Copied to Feature #4221: Develop radiometric calibration application, amicacal, for the Hayabusa AMICA framing instrument added

#6 - 2016-08-11 04:50 PM - Tyler Wilson

- Copied to Feature #4222: Develop radiometric calibration application, amical, for the Hayabusa AMICA framing instrument added

#7 - 2016-10-04 02:36 PM - Tyler Wilson

- Status changed from Resolved to In Progress

#8 - 2016-11-02 03:22 PM - Tyler Wilson

- Status changed from In Progress to Resolved